

regarding claims 2 and 9, the Examiner contends the recitation "horizontally disposed, ... plates" is indefinite since this limitation/structure has previously been claimed and it is unclear if applicants have failed to provide proper antecedence or if applicants are claiming additional radiation plates.

Claim 1 has been amended to more clearly distinguish the present invention.

Claims 1-2 and 5-7 have been rejected under 35 U.S.C. § 103 as being unpatentable over the IBM Technical Disclosure Bulletin reference in view of August.

The IBM Bulletin discloses a heat pipe cooler comprising a plurality of straps and a U-shaped heat pipe. Fig. 2 shows a circuit card which may contact one surface of the strap, but the heat pipe is not secured to the opposite surface of the strap. Therefore, the present invention differs from IBM in this regard.

In addition, claim 1 describes "said opposite end portions extending upright with respect to said heat receiving plate." The U-shaped heat pipe of IBM extends parallel to the circuit card. Therefore, the present invention differs from IBM in this regard.

In addition, claim 1 describes "a plurality of parallel extending heat radiating plates secured to said heat pipe." IBM does not show any parallel extending heat radiating plates secured to the heat pipe. Rather, the arrangement of Fig. 2 of IBM suggests that no parallel extending heat radiating plates can be secured to the heat pipe, since the heat pipe and the circuit card are arranged in a parallel and superimposed relationship.

Therefore, it is not proper to combine August with IBM. If the heat radiating plates of August are attached to the heat pipe of IBM, a circuit card cannot be attached in IBM.

The heat pipe cooler described in claim 1 of the present invention can be used with an electronic package such as the one shown in Fig. 1 of the present case. It is desired that the heat pipe cooler has a higher cooling efficiency within a limited surface area. Therefore, the heat receiving plate is coupled to the electronic package, and the heat pipe and the heat radiating plates can be accommodated within a space defined by a surface area of the heat receiving plate.

Therefore, the heat pipe is arranged upright with respect to the heat receiving plate. However, if a straight heat pipe is uprightly arranged with respect to the heat receiving plate, a contact area between the heat pipe and the heat receiving plate may be small. According to the present invention, the curved middle portion contacts the heat receiving plate, which provides a greater contact area so that a greater amount of heat can be transferred from the heat receiving plate to the heat pipe.

These advantages are not taught or suggested in the references.

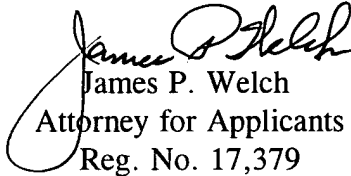
It is therefore believed, in view of the amendments to the claims and foregoing remarks, that the above-identified application is now patentably distinct from the cited art, and is therefore allowable. Early indication of allowance of the above-identified application is therefore respectfully requested.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact Applicant's undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, Applicant respectfully petitions for an appropriate extension of time. The fees for such an extension or any other fees which may be due with respect to this paper, may be charged to Deposit Account No. 01-2340.

Respectfully submitted,

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